

ABSTRACT OF THE DISCLOSURE

An object of the present invention is to provide a method and apparatus for heat-treating carbon fiber, in which impairment of a furnace caused by solidification of a transition metal impurity serving as a catalyst raw material is prevented, and the amount of the metal, such as Fe, Co, or Ni, contained in the carbon fiber is reduced. In the present invention, a vaporized metal impurity is contained in an inert gas that is passed through a furnace, and the gas is discharged from a high-temperature section of the furnace. The impurity contained in the gas discharged from the furnace is cooled to solidify, and then recovered. The resultant gas is recycled as an inert gas in the furnace.

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